

Stone Avenue and Grant Road, 7th Street and Arizona Avenue and Park-Euclid

Water Quality Assurance Revolving Fund (WQARF) Sites Tucson, Arizona

Community Involvement Plan



Stone Avenue and Grand Road WQARF Site Street View



7th Street and Arizona Avenue Soil Vapor Extraction System

Table of Contents

Community Involvement Plan – Introduction	iii
A. WQARF Process	iv
B. Designated Spokesperson	vi
C. Information Repository and Website	vi
Chapter 1 – Site Overviews	1
Chapter 2 – Community Profile	6
A. Community Involvement Area	6
B. Community Demographics	8
Chapter 3 – Community Issues and Concerns	12
A. Environmental and Health Concerns	12
B. Outreach and Other Concerns	13
C. Response to Community Issues and Concerns	15
Chapter 4 – Community Involvement Action Plan	15
A. Community Involvement Action Summary – Required Activities	15
B. Community Involvement Action Summary – Communication Techniques	22
	26

Appendices

Appendix A	Site History
------------	--------------

Appendix B Targeted Communities

Appendix C Local and State Elected Officials

Appendix D Community Advisory Board Members

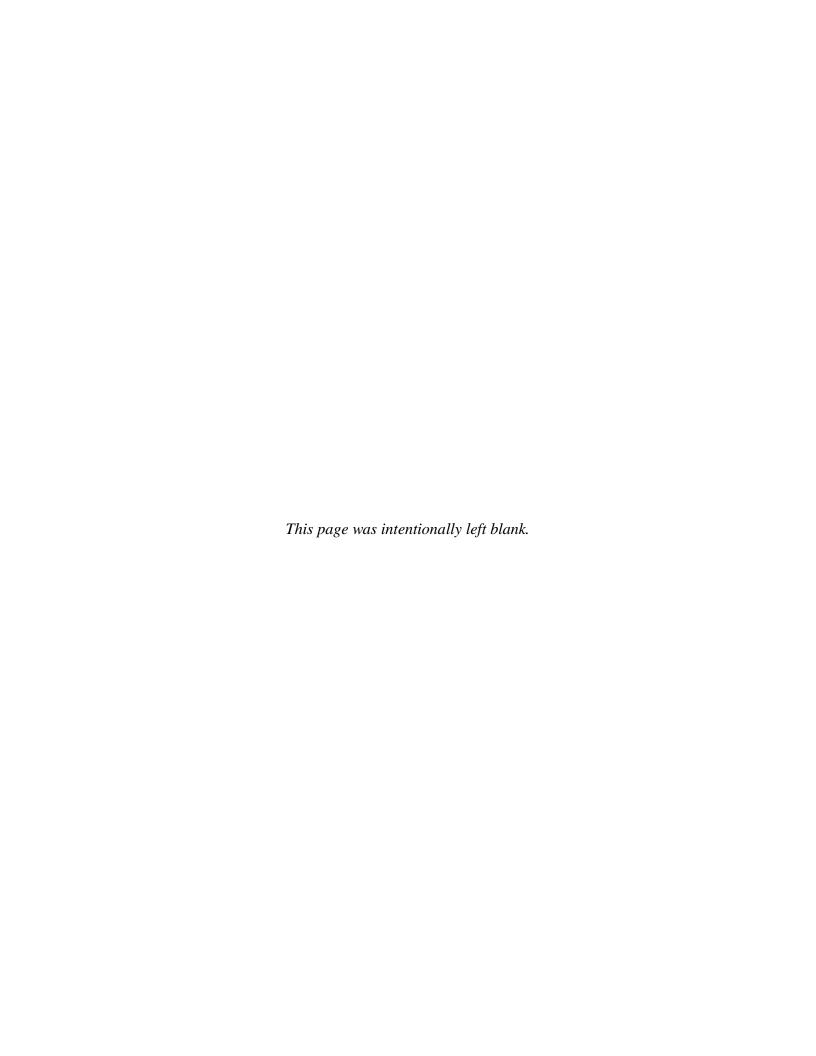
Appendix E Media Outlets

Appendix F Related Agencies and Contact Information

Acronyms and Glossary of Terms

Disclaimer: All telephone numbers, email addresses, and contact names are subject to changes after the date of this publication. The statistical data provided in the community demographics section is approximated based on information provided by the 2010 U.S. Census.





Community Involvement Plan – Introduction

The Arizona Department of Environmental Quality (ADEQ) is committed to involving citizens in the cleanup of contaminated sites in Arizona per the Water Quality Assurance Revolving Fund (WQARF) program. Created under the Environmental Quality Act of 1986 to support hazardous substance cleanup efforts in the state, WQARF is dependent upon legislative appropriations, cost recovery from responsible parties, corporate income taxes, and special fees for its funding.

The WQARF program identifies sites that are most in need of cleanup and adds them to the WQARF Registry. Sites on the WQARF Registry receive first consideration for distribution of funds for investigation and cleanup. WQARF Registry sites are assigned a numeric score based in part on the types of contaminants present, the location of the contaminants, and the number of people who may be affected by the contaminants. These scores are one criterion used to help determine relative risk at the site and do not necessarily mean that there is a direct risk to humans or the environment.

Arizona Revised Statutes (A.R.S.) § 49-287.03(B) and § 49-289.03, as well as Arizona Administrative Code (A.A.C.) R18-16-404, specify that a community involvement plan (CIP) be developed for each site before beginning the Remedial Investigation. The purpose of the CIP is to provide a meaningful process for two-way communication between ADEQ and the public to keep the community informed about the progress of the site investigation and remediation. The CIP will accomplish this goal through the following:

- 1. Ensuring public access to project information in a timely manner;
- 2. Identifying a community involvement area and opportunities for community members and other stakeholders to participate in the decision-making process associated with the environmental investigation and remediation of the site;
- 3. Establishing a Community Advisory Board (CAB);
- 4. Designating and ADEQ spokesperson; and
- 5. Developing a plan for distributing site information to residents within the site's community involvement area.

This CIP describes ADEQ's role and public participation opportunities regarding the WQARF process. ADEQ community involvement staff will review and update this plan on a regular basis considering site-specific developments and public health and environmental impacts, as well as public comments and community concerns. ADEQ also will solicit and consider CAB input to this CIP.



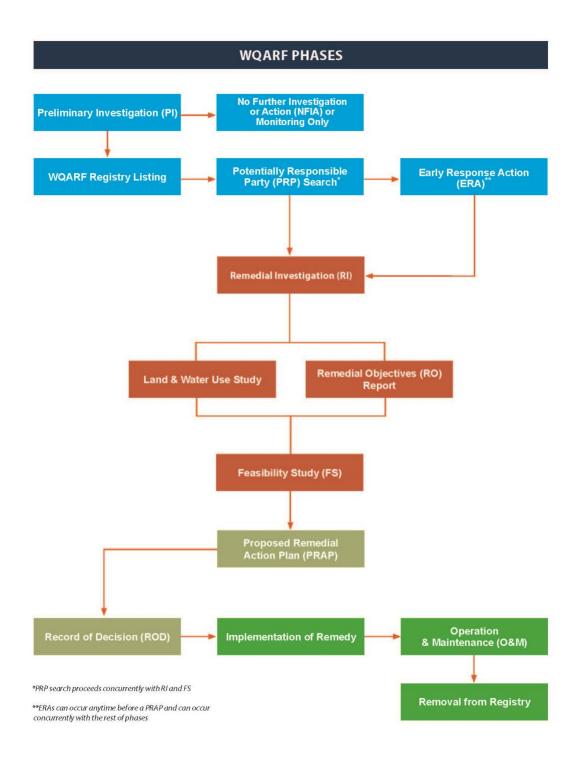
A. WQARF Process

The goal of the WQARF process is to clean up sites with groundwater and/or soil contamination to ensure that human health and the environment are protected. The WQARF process uses a step-by-step approach to thoroughly investigate contaminated sites and determine the best method for achieving site cleanup. This process can take months, years, or in some cases, decades, to complete. Because each site is different, the WQARF process helps determine which cleanup method is best for a specific site.

For sites where the contamination has minimal impact to humans, cleanup may be achieved by restricting land or water use and allowing the contamination to dissipate naturally. For this method, regular monitoring of the groundwater or soil would occur to ensure that the contamination continues to decrease. For sites where the contamination may impact human use, the cleanup method may involve restricting land or water use, actively treating or filtering the groundwater to remove contamination, digging up any contaminated soil and removing it from the area, bioremediation/other in situ methods, or a combination of these actions.

The WQARF process flow chart that follows depicts the phases in the WQARF process from initial investigation of a site suspected of having contamination, to implementation of the cleanup method (also known as the remedy), to eventual removal of the site from the WQARF Registry upon satisfactory cleanup. Detailed definitions of each WQARF phase can be found in the glossary at the end of this CIP.







B. Designated Spokesperson

A designated spokesperson will inform the public of upcoming events, ensure that the CIP is implemented according to schedule, and act as liaison between ADEQ and the community. In addition, the spokesperson will determine methods for personal contact, arrange for the availability of a translator at meetings as needed, and coordinate the recording of presentations, when appropriate. For further information regarding the Stone Avenue and Grant Road, 7th Street and Arizona Avenue and Park-Euclid WQARF sites, please contact the designated spokesperson at the following:

Community Involvement Coordinator ADEQ

1110 West Washington Street, 6th Floor Phoenix, AZ 85007 (602) 771-4410 Or

(800) 234-5677, Ext. 6027714410 Fax: (602) 771-4272

View Community Involvement Contacts Online: http://www.azdeq.gov/node/337

C. Information Repository and Website

An information repository of existing public documents pertaining to the Stone Avenue and Grant Road, 7th Street and Arizona Avenue and Park-Euclid WQARF sites are available for review both online and in person. Documents found in the repository include the WQARF Site Registry Reports; Final Remedial Investigation Reports; CIP; Feasibility Study Work Plans, as well as site fact sheets, public notices, and materials from CAB meetings. Technical documents relating to future milestones in the WQARF process will be made available to the public as they are completed. Interested parties can review site information by visiting the information repository online or in person as follows:

Online

http://www.azdeq.gov/node/987 http://www.azdeq.gov/node/1013 http://www.azdeq.gov/node/2332

In Person

ADEQ Records Center 1110 West Washington Street Phoenix, AZ 85007

Or

(800) 234-5677, Ext. 6027714380 (Please call to make an appointment.)

To make alternate arrangements to review documents in person at the location nearest you, contact the ADEQ Community Involvement Coordinator.



Chapter 1 – Site Overviews

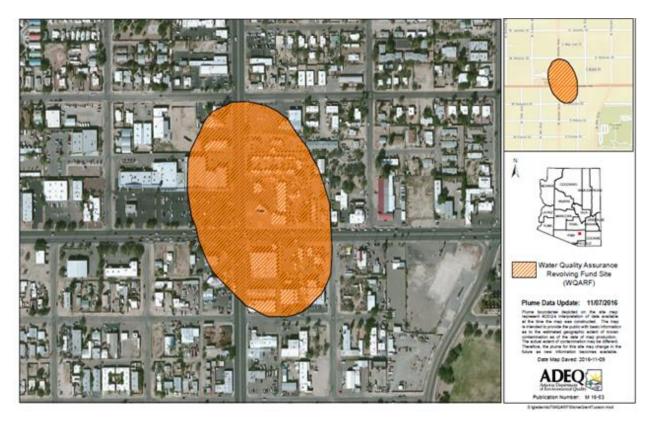
The following provides an overview, map and historical information regarding the Stone Avenue and Grant Road, 7th Street and Arizona Avenue and Park-Euclid WQARF Sites.

Stone Avenue and Grant Road

The Stone Avenue and Grand Road WQARF site is located in Tucson, Arizona. The site was placed on the WQARF Registry with an eligibility and evaluation score of 45 out of a possible total of 120. The major factors leading to the site's score was the presence of volatile organic compounds (VOCs) in groundwater at levels exceeding Arizona Aquifer Water Quality Standards (AQWS).

The Stone Avenue and Grant Road WQARF site is bounded by East Alturas Street to the north, East Sahuaro Street to the south, North Estrella Avenue to the east, and North Castro Avenue to the west.

Stone Avenue and Grant Road WQARF Site - Tucson, Arizona





The Stone Avenue and Grant Road WQARF site contaminants of concern are tetrachloroethylene (PCE) and trichloroethylene (TCE).

A former dry cleaning facility, Supreme Cleaners (formerly Lance Alworth's Dry Cleaning), was located within the Stone Avenue and Grant Road site at 2332 North Stone, Tucson, Arizona. This facility operated from 1946 until the mid-1970s. According to historical records, PCE was the primary solvent used for dry cleaning. In 1963, a gas explosion occurred, resulting



Groundwater Monitoring Well Sampling

in natural gas and dry cleaning solvent being released into the environment. The facility was rebuilt and the dry cleaning operations resumed until the mid-1970s when an automotive paint store began operating at the site. Finishmaster, Inc., a retail automotive paint store, currently operates at the Stone Avenue and Grant Road WQARF site.

In 2005, groundwater contamination was discovered in the regional aquifer located at the Sleepy Hollow Mobile Home Park. PCE was detected at a concentration of 2.8 micrograms per liter (μ g/L) in one of two domestic wells located at the Sleepy Hollow Mobile Home Park. The domestic well was deactivated in 2010 and later capped in 2011. The Sleepy Hollow Mobile Home Park is approximately 0.6 miles west-northwest of the Stone Avenue and Grant Road WQARF site.

In 2014, the City of Tucson conducted a Phase 1 Environmental Site Assessment. Recommendations from this investigation included the collection of soil and soil-gas samples for analyses of polycyclic aromatic hydrocarbons and/or VOCs. In December 2014, soil and soil-gas samples were collected at the site. The analyses indicated that VOCs were not detected in eleven soil samples collected from four soil borings. A total of four sub-slab soil-gas samples were collected at the former Supreme Cleaners. PCE was detected in all four samples at concentrations ranging from 22,000 to 450,000 micrograms per cubic meter (μ g/m³). The U.S. EPA Region IX Regional Screening Level for PCE in industrial air is 47 μ g/m³.

ADEQ conducted a screening level WQARF Preliminary Investigation (PI) of a 0.76-acre lot located at 2314 and 2332 N. Stone Avenue in Tucson, Arizona. The PI Report for Stone Avenue and Grant Road was completed in February 2016. The purpose of the PI was to gather additional data and determine if the site should be added to the WQARF Registry. The PI Report included an evaluation of historical data, a conceptual site model, and a listing of environmental sites in the area.

The PI Report identified a former Texaco Station LUST site located at 1 East Grant Road and Home Laundry & Dry Cleaning, another dry cleaning facility located at 20 West Grant Road, as other potential sources of contamination. In addition, up to four other current or former dry cleaners are located within one-half mile of the Stone Avenue and Grant Road WOARF site.



In 2016, the City of Tucson began working on an expansion of Grant Road that involved relocating utilities and soil excavation along the northern edge of the site. The utility and road workers involved with the City of Tucson's Grant Road expansion represent potential receptors to the contamination associated with the site. In addition, some other possible receptors include area residents, local businesses, and their customers.

The potential exposure pathways associated with contaminants at the Stone Avenue and Grant Road WQARF site include inhalation of contaminated vapors, ingestion and dermal contact with contaminated soil and ingestion and dermal contact with contaminated groundwater.

ADEQ plans to begin an Early Response Action (ERA) at the Finishmaster, Inc. property. The ERA may include a soil-gas investigation and the installation of a groundwater monitoring well in the source area. A remediation system will be designed and installed based on the analytical results. ADEQ began the Remedial Investigation in July 2017.

7th Street and Arizona Avenue and Park-Euclid WQARF Sites Plumes – Tucson, Arizona

The contaminated groundwater plumes at both the 7^{th} Street and Arizona Avenue and Park-Euclid WQARF sites are shown on the map below.



7th Street and Arizona Avenue

The 7th Street and Arizona Avenue WQARF site is located east of downtown Tucson. The area consists of a mixture of commercial businesses, light industrial businesses, warehouses, and residential neighborhoods. The site is bounded approximately by Speedway Boulevard to the



north, 8^{th} Street and the Union Pacific railroad to the south, 4^{th} Avenue to the east, and Ash Avenue to the west. The source of contamination is a former dry cleaner that was located at 300 East 7^{th} Street.

The 7th Street and Arizona Avenue site was placed on the WQARF Registry in 2000 with an eligibility and evaluation score of 40 out of a possible total of 120. The major factor leading to the site's score in 2000 was the presence of contaminants like (PCE) and (TCE) in groundwater samples collected at levels that exceeded the Arizona Aquifer Water Quality Standards.

The 7th Street and Arizona Avenue WQARF site contaminants of concern in groundwater are PCE, TCE, and *cis*-1,2-dichloroethene.



Groundwater Monitor Well Being Installed at 7th Street and Arizona Avenue WQARF Site

On May 5, 2014, ADEQ issued a public notice announcing the availability of the 7th Street and Arizona Avenue WQARF site Proposed Remedial Action Plan for a 30-day public comment period. ADEQ issued the final remedial investigation (RI), feasibility study (FS) and the draft proposed remedial action plan (PRAP) in 2014. In 2015, a second source – the former dry-cleaning facility property at 847 N. Stone Ave. – was added to the site. In 2017, SVE was implemented at 847 N. Stone Ave. as an early response action for the second source. ADEQ is currently in the process of re-evaluating the necessity of addressing data gaps at the site and revising the Feasibility Study to include consideration of the 847 North Stone Avenue source.

Park-Euclid

The Park-Euclid WQARF site is located east of downtown Tucson. It is bounded approximately by 8th Street to the north, 14th Street to the south, Mountain Avenue to the east, and Park Avenue to the west in a mixed commercial and residential part of metropolitan Tucson. The site includes facilities located at both 299 and 301 South Park Avenue, where three companies have conducted laundry and dry cleaning operations since the late 1930s.





Groundwater Monitor Well at Park-Euclid WQARF Site

The Park-Euclid site was placed on the WQARF Registry in 1999 with an eligibility and evaluation score of 51 out of a possible total of 120. The major factor leading to the site's score in 1999 included the presence of contaminants like PCE in groundwater samples collected at levels that exceed the Arizona Aquifer Water Quality Standard.

The Park-Euclid site contaminants of concern in perched groundwater and soil gas include PCE; TCE; *cis*-1,2-dichloroethene; *trans*-1,2-dichloroethene, and vinyl chloride.

The Park-Euclid site Feasibility Study was performed by present and former facility operators known as the Park-Euclid Working Group with ADEQ oversight. In January 2013 Park-Euclid Group's Feasibility Study Work Plan was submitted and approved by ADEQ. The Feasibility Study was given final approval by ADEQ in November 2017.

A. Community Involvement Area

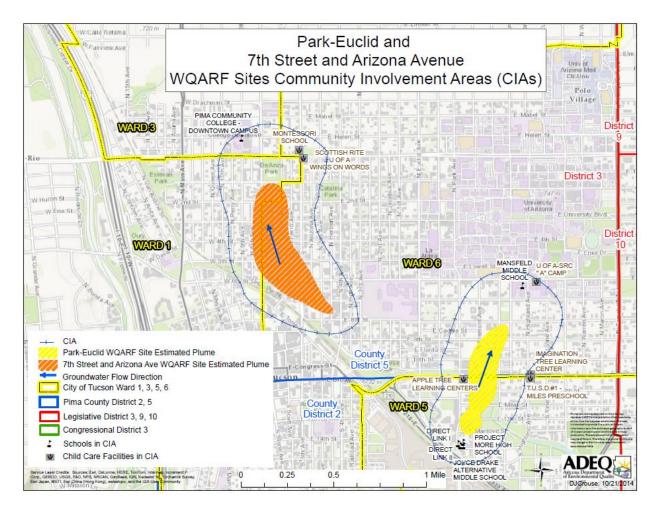
ADEQ has established a community involvement area for each site on the WQARF Registry per A.R.S. § 49-289.02(A) and (B). A community involvement area is established to designate a geographic area to which mass mailings will be delivered. Community involvement area boundaries are determined based on site-specific characteristics such as the affected media (i.e., soil, surface water, or groundwater), exposure routes, proximity to residential areas and public facilities, and level of community interest. The community involvement area may change as new information is received.

The map below illustrates the 2017 community involvement area for the Stone Avenue and Grant Road WQARF site.





The map below illustrates the 2015 community involvement areas for the 7^{th} Street and Arizona Avenue and Park-Euclid WQARF sites.





B. Community Demographics

The Stone Avenue and Grant Road, 7th Street and Arizona Avenue, and Park-Euclid WQARF sites are located in Tucson, Arizona and consist of a mixture of commercial businesses, light industrial businesses, warehouses, and residential neighborhoods. As reported by the 2010 U.S. Census, the City of Tucson's population was 520,116, making it the second most populated city in Arizona. The community involvement area boundaries for the Stone Avenue and Grant Road, 7th Street and Arizona Avenue, and Park-Euclid WQARF sites encompass three zip codes (85701, 85705, and 85719) and are estimated to contain approximately 44,771 households.

The 2010 U.S. Census data for the zip codes encompassed by the community involvement areas indicates that the total population was 106,493 with an average household size of 2.08 persons. Residents of the area consisted of fewer homeowners (33.2%) than renters (66.8%). The median resident age is 30.3, which is younger than the median age for Arizona residents as a whole (35.9)¹.

As represented in the following Population Groups graph, the U.S. Census data show that residents in the Stone Avenue and Grant Road, 7th Street and Arizona Avenue, and Park-Euclid WQARF sites community involvement areas identify themselves as approximately 70.8% White; 13.0% Some Other Race; 4.8% Black or African American; 4.6% Two or More Race; 3.5% Asian; 3.2% American Indian or Alaska Native; and less than 0.1% Native Hawaiian. According to the U.S. Census Bureau, people of Hispanic or Latino within the Stone Avenue and Grant Road, 7th Street and Arizona Avenue, and Park-Euclid WQARF sites community involvement areas comprised 36.2% of the population, which is higher than the 29.6% average Hispanic and Latino population for the State of Arizona². The higher than average Hispanic and Latino population may indicate the need for Spanish translation services and will be taken into consideration by ADEQ along with community feedback and state guidelines.

All percentages given in the following chart and the previous two paragraphs are median averages of the 2010 U.S. Census data for the zip code areas within the Stone Avenue and Grant Road, 7th Street and Arizona Avenue, and Park-Euclid WQARF sites community involvement areas.

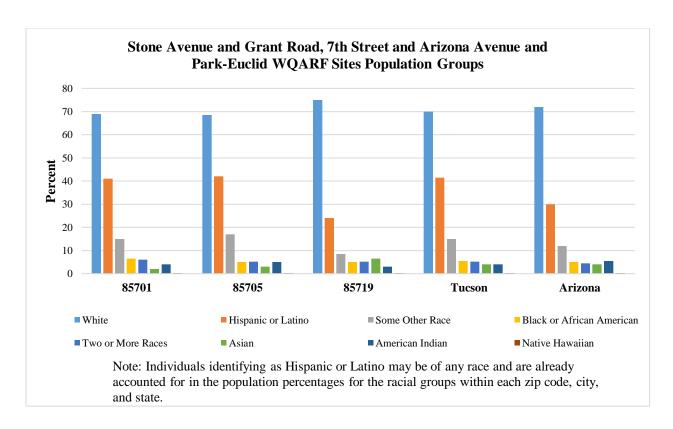
Although U.S. Census data has been chosen to establish the basis of community demographics, ADEQ is aware of the limitations of using this data. The data is only as accurate as the individuals that provide the information and the date at which the information was collected. ADEQ is aware that some populations may be inadequately represented by U.S. Census data and welcomes additional feedback from the community.



Stone Avenue and Grant Road, 7th Street and Arizona Avenue,

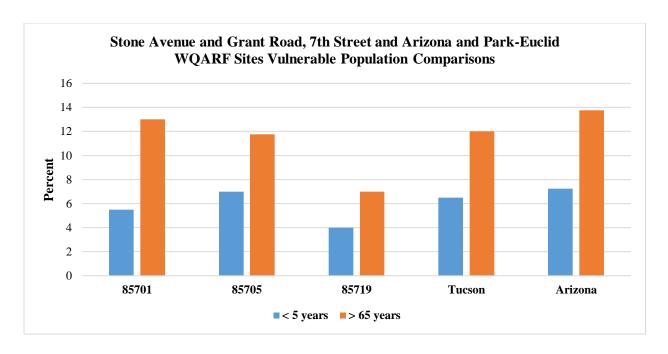
¹ Calculations are an average of the three zip codes.

² Calculations are an average of the three zip codes.

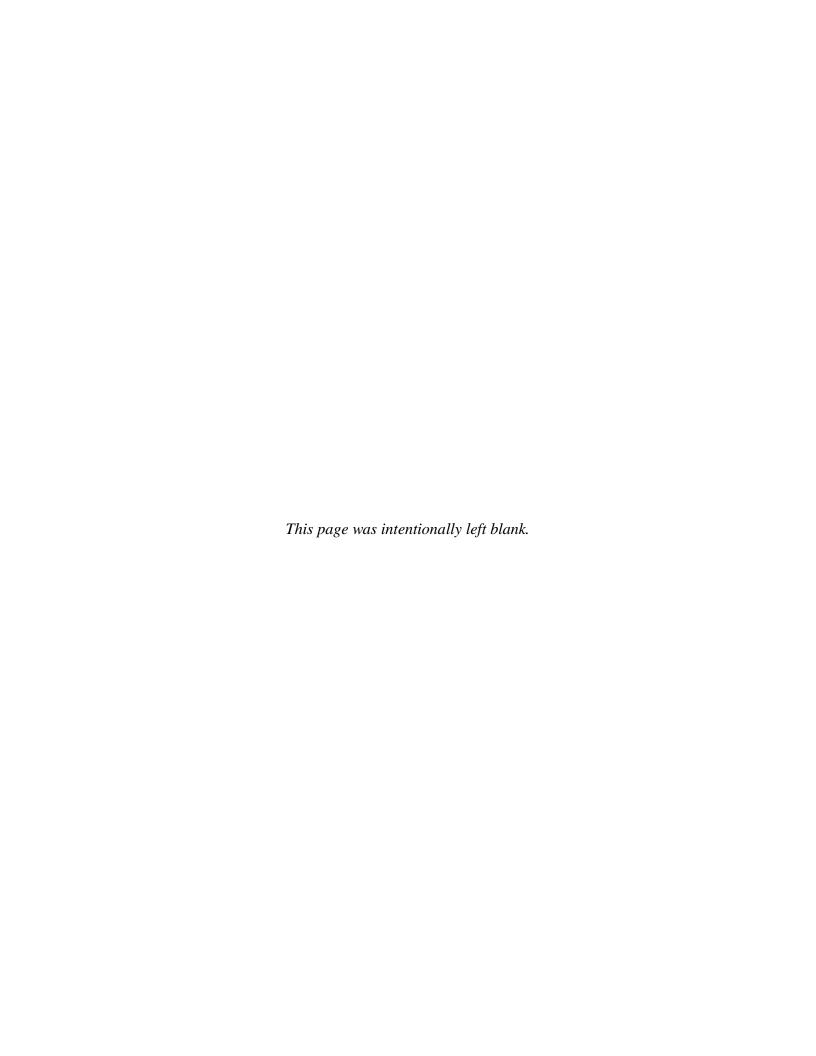


ADEQ also looks at the community as a whole with an emphasis on the percentage of people who are usually sensitive to contaminants. These people are those who are under the age of 5 or over the age of 65, as well as people with health issues. The percentages of age-sensitive populations within the Stone Avenue and Grant Road, 7th Street and Arizona Avenue, and Park-Euclid WQARF sites community involvement areas, according to the 2010 U.S. Census data, are presented in the following Vulnerable Populations Comparisons graph.





For further demographic information regarding the community involvement areas, please refer to the listing of neighborhood associations, community schools, and vulnerable population centers in Appendix B, and local and state elected officials in Appendix C.



Chapter 3 – Community Issues and Concerns

To better understand the community and its concerns, ADEQ conducted telephone interviews with community and CAB members who live/have lived and/or worked in the area surrounding the Stone Avenue and Grant Road, 7th Street and Arizona Avenue and Park-Euclid WQARF sites. The CAB members are listed in Appendix D. The following is a summary of common concerns involving the environment, health, and ADEQ outreach activities.

A. Environmental and Health Concerns

Stone Avenue and Grant Road

ADEQ also solicited input from the general public via a postal mailing. A total of fifteen responses were received from the community, which included nine CAB applications. Of the fifteen responses, twelve respondents were contacted and nine interviews were conducted.

In general, the interviewees were from an area that ranged from within two blocks to two miles from the Stone Avenue and Grant Road WQARF site. A mixture of individuals were interviewed with some living and/or working within the area for less than six months while others lived and/or worked there for over fifty years. Many of the interviewees were concerned about the health effects of the contamination and concerns related to cancer risks. Most interviewees were aware of the ongoing construction associated with the widening of the road. It was the position of some interviewees that most people in the area were not aware of the contaminants associated with the site and were only aware of the construction for the road widening. Some interviewees are concerned about the water quality and its effects on areas wells. One interviewee mentioned PCE and was concerned about its effect on drinking water, the elderly and children. Some of the major concerns and questions raised are below:

- What impact does the contamination have on the wells in the area?
- Are there contaminants in soil?
- Concerns related to the contamination being at the site for several years before recently receiving information about it.
- Concerns related to the water and water quality.
- What chemicals are in the area and are there health risks?
- How long will it take to conduct the cleanup?

7th Street and Arizona Avenue and Park-Euclid

All of the interviewees knew that the 7th Street and Arizona Avenue and Park-Euclid sites were on the WQARF Registry and had known of the sites for more than 10 years. Most of the interviewees either lived or worked in the immediate area. These individuals were also familiar with the history of the two sites as well as their current status as a "joint" community involvement site.



All of the interviewees were familiar with the history of dry cleaning operations at the two WQARF sites: Oliver's Dry Cleaning at the 7th Street and Arizona Avenue WQARF site and Mission Linen Dry Cleaning at the Park-Euclid WQARF site. Most of the interviewees knew that the contaminants of concern at these sites were TCE and PCE, and that these contaminants were dry cleaning solvents that had been disposed of on the ground or had leaked from tanks on the properties.

When the interviewees were asked about their knowledge of the sites and work that has been done at those sites to date, their responses indicated that they had a good understanding of site activities. Community and CAB member interviewees understood that remedial work underway at the 7th Street and Arizona Avenue site was in the early stages and that ADEQ had installed a series of monitoring and sentinel wells to track the movement of the groundwater plume. One CAB member stated that ADEQ had good technical data for the Park-Euclid site and was providing oversight activities needed for Mission Linen to remediate the area.

The interviewees seemed focused on three primary concerns: 1) the contaminant plume associated with the Park-Euclid site that is headed toward groundwater wells at the University of Arizona campus; 2) the slow cleanup process at both sites and a lack of aggressive planning on behalf of ADEQ; and 3) the possible contamination that could result from the air stripping process at the Park-Euclid Site.

When asked to provide feedback regarding the overall community perception of the sites, all those interviewed stated that they did not think that the community knew or understood what was going on. One community member stated that the local community was living in "blissful ignorance"; however, several other interviewees said that the lack of funds to conduct community meetings had made it difficult to interest and involve the community in site activities.

B. Outreach and Other Concerns

Stone Avenue and Grant Road

The majority of the interviewees indicated that they felt that the information received from ADEQ was clear and easy to understand. They believed they were being adequately informed about the site. Most interviewees were aware of who to contact at ADEQ if they had questions and knew the ADEQ website provided information they may require. The majority of the interviewees were asked to rate their preference on the format for communication using a scale from 1 to 3. The results were averaged and indicated that mailings received the highest average score followed by television. The lowest rating was for radio. The results are summarized on the following page:



a)	Mailings	2.3
b)	Emails	2.0
c)	Information on ADEQ website	1.9
d)	A combination of (b) and (c)	2.0
e)	Public Meetings	1.9
f)	Neighborhood, open house	1.8
g)	Radio	1.3
h)	Television	2.2
i)	Newspaper(s)	1.8

The interviewees were asked if they had any suggestions for reaching out to the community as well as identifying any groups that were not addressed. Some of the suggestions are included below:

- Knocking on doors and handing out flyers;
- Updates via postal mailing and emails; and
- Use of additional outreach efforts to inform residents of assisted living and rehabilitation facilities who may have special needs.

7th Street and Arizona Avenue and Park-Euclid

Interviewees provided the following feedback and suggestions on current and future outreach pertaining to the 7th Street and Arizona Avenue and Park-Euclid WQARF sites:

- Interviewees stated that they received information on the WQARF sites primarily from U.S. Mail and email notices, with some interviewees noting information obtained via telephone calls.
- Interviewees preferred three methods of communication between ADEQ and the community for site status updates and upcoming activities: email, U.S. Mail, and public meetings.
- Suggestions for other methods of communication included
 - o Social media,
 - o Flyers for door-to-door distribution, and
 - Notices to local neighborhood associations.
- Some interviewees noted that ADEQ could present information at CAB meetings at a slightly faster pace.
- One interviewee recommended that ADEQ put the site information repository online.

The majority of interviewees stated that, aside from environmental or health concerns, additional concerns at the sites included a lack of funding and the slow progress made in addressing contamination at the WQARF sites.



C. Response to Community Issues and Concerns

ADEQ uses the information gathered from community interviews, CAB and public meetings, and direct contact to ensure that the future outreach activities and materials are able to address community questions and concerns as well as keep the community informed of WQARF site activities.

Chapter 4 – Community Involvement Action Plan

In addition to providing the framework for the state to investigate and clean up contaminated sites, the WQARF program also requires that ADEQ involve the community in the cleanup process. The following Community Involvement Action Summary table describes the required community involvement activities by WQARF phase and illustrates where the Stone Avenue and Grant Road, 7th Street and Arizona Avenue, and Park-Euclid sites are in the WQARF process at the time of writing. This summary is followed by a description of the communications vehicles and techniques available to use. Multiple techniques to communicate with and educate the public may be used throughout the process of remediating the WQARF sites.

A. Community Involvement Action Summary – Required Activities

The following Community Involvement Action Summary table describes the required community involvement actions for the Stone Avenue and Grant Road, 7th Street and Arizona Avenue and Park-Euclid sites and notes what actions have been completed to date.



	Community	Involvement Action Sur	nmary			
WQARF Phase	Mandated ADEQ Community Involvement Activity	Statute (A.R.S.)	(A.R.S.)			
	(See Chapter 4, Section B, for a detailed description of the applied communications techniques described herein.)	and Rule (A.A.C) References	Activity to Date ³	Stone Avenue and Grant Road	7 th Street and Arizona Avenue	Park- Euclid
Preliminary Investigation	Provide owners and operators a copy of the Draft WQARF Site Registry Report for a 15-day comment period prior to publishing a notice in a newspaper announcing the availability of the Draft WQARF Site Registry Report for a 30-day public comment period.	A.R.S. § 49-289.03(A)(1)	Mailing to owners and operators: -7 th Street and Arizona Avenue, April 2000* -Park-Euclid, January 1999 Public notice/comment; published in <i>Daily Territorial:</i> -Stone Avenue and Grant Road, November 2016 Public notice/comment; published in <i>Arizona Daily Star:</i> -7 th Street and Arizona Avenue, April 2000* -Park-Euclid, March 1999	✓	√	✓
WQARF Registry Listing	 Following the listing of a site on the WQARF Registry, ADEQ will: Establish a preliminary community involvement area (see Chapter 2, Section A) within 90 days of site listing on the WQARF Registry. Provide written notice to the community on hazardous substance contamination in the area, the actual and potential risks and routes of exposure, possible health effects, and the opportunity to join the site mailing list. Identify ADEQ personnel to contact for further information. 		Notice to community and development of a community involvement area: -Stone Avenue and Grant Road, Summer 2017 -7th Street and Arizona Avenue, Spring 2013* -Park-Euclid, December 1999	✓	√	✓
	Develop a CIP that established a CAB, designates a spokesperson, provides for newsletters with current information about the status of remedial actions at the site, establishes a public document repository location, and provides for schedules of CAB meetings and public meetings. Update the CIP at least every 2 years.		Stone Avenue and Grant Road -Original CIP, Spring 2017 7th Street and Arizona Avenue -First CIP combined CIP with Park-Euclid, May 2016 Park-Euclid -Original CIP, Spring 2000* -Updated, September 2004 and September 2014	✓	~	✓

Stone Avenue and Grant Road, 7th Street and Arizona Avenue,



³ Dates marked with an asterisk are approximate.

	Com	munity Involvement Action Summ	nary			
	Mandated Community Involvement Activity	Statute (A.R.S)		Complete		
WQARF Phase	(See Chapter 4, Section B, for a detailed description of the applied communications techniques described herein.)	and Rule (A.A.C) References	Activity to Date ³	Stone Avenue and Grant Road	7 th Street and Arizona Avenue	Park- Euclid
Early Response Action	A work plan shall be prepared for each Early Response Action that will include a description of work to be done, known site conditions, a plan for conducting the work; a description of community involvement activities for the Early Response Action under R18-16-404; and a schedule. Community involvement activities may include development of a community involvement plan under A.A.C R18-16-404(C) or community involvement activities appropriate to the score and schedule of the work performed such as a general public notice to those who may be impacted by field work as indicated in A.A.C. R18-16-404(D)(2). If immediate action is necessary to address current risk to public health or the environment, to protect a source of water, or to provide a supply of water, the work plan and written rationale may be prepared and the community involvement activities may be conducted after commencement of the Early Response Action.	A.A.C. R18-16-404 A.A.C. R18-16-405(D)(2) A.A.C. R18-16-405(E) A.A.C. R18016-405(G)	Stone Avenue and Grant Road -Early Response Activities, Spring 2017 7th Street and Arizona Avenue -Well installation notices to businesses surrounding Oliver's Cleaners, December 2005 -Groundwater sampling notices to businesses surrounding Oliver's Cleaners, January 2005 Park-Euclid -Past activities currently being researched	√	√	
Remedial Investigation ⁴	Provide notice to interested parties announcing the availability of the Remedial Investigation Scope of Work or Work Plan, Fact Sheet, and CIP Outline for review and a 30-day public comment period. Provide notice indicating that any person by agreement with the ADEQ may develop and implement a work plan for the Remedial Investigation and Feasibility Study and solicit information regarding the current and future land and water uses at the site. These notices shall also provide an opportunity to request a public meeting. Establish a selection committee to choose CAB members for the site. The selection committee shall consist of the following number of people from each organization:	A.R.S. § 49-287.03(B) A.R.S. § 49-287.03(C) A.A.C. R18-16-301(C) A.A.C. R18-16-403(F) A.A.C. R18-16-404(C)(1)(a) A.A.C. R18-16-406(B) A.A.C. R18-16-406(D) A.R.S. § 49-289.03(D)	Stone Avenue and Grant Road -June 2017 Combined Notices -7 th Street and Arizona Avenue, March 29, 2013 - Park-Euclid, May 2004 Selection Committee: -Stone Avenue and Grant Road, N/A due to merging	√	√	✓ ·
	 ADEQ: 1 Potentially Responsible Party: 1 Local Official: 1 Local Community: 2 		with the Park-Euclid/7 th Street and Arizona Avenue CAB as of March 28, 2017 -7 th Street and Arizona Avenue, N/A – CAB merged November 14, 2013 -Park-Euclid, September 27, 1999	✓	√	✓

⁴ A potentially responsible party search is conducted concurrently with the Remedial Investigation and Feasibility Study, but does not have mandated community involvement activities. ⁵ Data collected from land and water use studies will be incorporated into the Remedial Investigation and/or Remedial Objectives report per A.A.C. R18-16-406(D)-(I).





		nvolvement Action Summary			Complete	
WQARF Phase	Mandated ADEQ Community Involvement Activity (See Chapter 4, Section B, for a detailed description of the applied communications techniques described herein.)	Statute (A.R.S) and Rule (A.A.C) References	Activity to Date ³	Stone Avenue and Grant Road	7 th Street and Arizona Avenue	Park- Euclid
Remedial Investigation (continued)	Establish a CAB of between 5 to 20 members that represent a diversified cross section of the community. Within 90 days of appointment by the CAB selection committee, the CAB shall elect co-chairpersons and develop a charter defining operating procedures, membership terms and obligations, goals for developing issues, concerns and opportunities related to quick cleanup of the site, and any other anticipated activities for identifying and improving the public's access and understanding of information regarding the remediation process at the site.	A.R.S. § 49-289.03(C) A.R.S. § 49-289.03(F)	CAB established: -Stone Avenue and Grant Road, CAB applications received, will be voted on by existing Park-Euclid/7 th Street and Arizona Avenue CAB members. -7 th Street and Arizona Avenue, November 14, 2013 (Merged with Park-Euclid CAB) -Park-Euclid, March 29 2000		√	✓
	Publish a combined ⁶ public notice announcing the availability of the Draft Remedial Investigation Report for review and a minimum 30-day public comment period as well as a public meeting to solicit Remedial Objectives for the site. The public meeting shall be held not less than 45 calendar days and not more than 90 calendar days after release of the Draft Remedial Investigation Report, unless ADEQ sets a different date for good cause.	A.A.C. R18-16-301(C) A.A.C. R18-16-404(C)(1)(b) A.A.C. R18-16-406(F) A.A.C. R18-16-406(I)(1) A.A.C. R18-16-406 (I)(2)	Public notice and comment: -7 th Street and Arizona Avenue, May 17, 2013 -Park-Euclid, July 4, 2004 Public meeting: -7 th Street and Arizona Avenue, May 17, 2013 -Park-Euclid, September 14, 2004		✓	✓
	Publish a public notice announcing the availability of the Proposed Remedial Objectives Report for a 30-day public comment period. Publish a public notice of the availability of the Final Remedial Investigation Report, which shall contain the results of site characterization and the final Remedial Objectives Report. The final Remedial Investigation report shall be accompanied by responsiveness summaries regarding comments, issues and concerns raised in the community involvement process and, if the report is prepared by a person other than ADEQ, copies of the comments received.	A.A.C. R18-16-301(C) A.A.C. R18-16-404(C)(1)(c) A.A.C. R18-16-406(J)(5) A.A.C. R18-16-406(J)	Proposed Remedial Objectives Report public notice and comment: -7 th Street and Arizona Avenue, March 21, 2014 -Park-Euclid, June 9, 2006 Final Remedial Investigation Report public notice: -7 th Street and Arizona Avenue, April 24, 2014 -Park-Euclid, November 15, 2011*		✓	✓

Stone Avenue and Grant Road, 7th Street and Arizona Avenue,



⁶ If not combined, separate public notices will be provided for the Draft Remedial Investigation/comment period and the Remedial Objectives solicitation and public meeting.

Community Involvement Action Summary

				Complete			
WQARF Phase	Mandated ADEQ Community Involvement Activity (See Chapter 4, Section B, for a detailed description of the applied communications techniques described herein.)	Statute (A.R.S) and Rule (A.A.C) References	Activity to Date ³	Stone Avenue and Grant Road	7 th Street and Arizona Avenue	Park- Euclid	
Feasibility Study	Provide notice to interested parties announcing the availability of the Feasibility Study Work Plan* Although not mandated, ADEQ will also provide public notice upon completion of the Feasibility Study.	A.A.C. R18-16-404(C)(1)(d) A.A.C. R18-16-407(B)	Feasibility Study Work Plan public notice: -7 th Street and Arizona Avenue, March 28, 2014 -Park-Euclid, May 5, 2013 Feasibility Study public notice: -7 th Street and Arizona Avenue, May 5, 2014 -Park-Euclid, May 2016		√	√	
Proposed Remedial Action Plan	Publish a public notice announcing the availability of the Proposed Remedial Action Plan for a 30-day public comment period. Mail the same notice to interested parties. The notice will describe the proposed remedy and its estimated cost and identify where the Proposed Remedial Action Plan, Remedial Investigation, and Feasibility Study Reports may be inspected.	A.R.S. § 49-287.04(B) A.R.S. § 49-289.03(A)(2) A.A.C. R18-16-301(C) A.A.C. R18-16-404(C)(1)(e) A.A.C. R18-16-408(A)	Proposed Remedial Action Plan public notice and comment: -7 th Street and Arizona Avenue, May 5, 2014		✓		
Record of Decision	Publish a public notice announcing the availability of the Record of Decision and Responsiveness Summary for review.	A.R.S. § 49-287.04(G) A.A.C. R18-16-404(C)(1)(f) A.A.C. R18-16-410					
Implementation of Remedy (Remedial Actions)	Publish a public notice announcing a request for ADEQ to approve remedial actions at the site. The notice will provide the opportunity for a 30-day public comment period. Provide notice to the public and interested parties of a request for ADEQ to waive a regulatory requirement (permit) to complete remedial actions.	A.A.C. R18-16-301(C) A.A.C. R18-16-404(C)(1)(h) A.A.C. R18-16-413 A.R.S. § 49-290 A.A.C. R18-16-404(C)(1)(l)					
	Provide notice to the public that fieldwork conducted to remove contaminants of concern may result in noise, light, odor, dust or other adverse impacts.	A.A.C. R18-16-404(C)(1)(m)					
	Provide notice to the public of a request for ADEQ to determine whether each of the Remedial Objectives for a site have been satisfied and will continue to be satisfied. The notice will provide the opportunity for a 30-day public comment period on the request.	A.A.C. R18-16-301(C) A.A.C. R18-16-404(C)(1)(n) A.A.C. R18-16-416(B)					



Community Involvement Action Summary

				Complete			
WQARF Phase	Mandated ADEQ Community Involvement Activity (See Chapter 4, Section B, for a detailed description of the applied communications techniques described herein.)	Statute (A.R.S) and Rule (A.A.C) References	Activity to Date ³	Stone Avenue and Grant Road	7 th Street and Arizona Avenue	Park- Euclid	
Operation & Maintenance	Publish a public notice announcing the availability of the Operation & Maintenance Plan for review and a 30-day public comment period. Mail the same notice to interested parties.	A.A.C. R18-16-301(C) A.A.C. R18-16-404(C)(1)(g) A.A.C. R18-16-411(E)					
Removal from Registry	Although not mandated by Arizona statute or administrative code, ADEQ may publish a public notice upon the removal of the site from the WQARF Registry.	Not Applicable					
Any Phase	Publish a public notice announcing a request to ADEQ for a prospective purchaser agreement. The notice will provide the opportunity for a 30-day public comment period.	A.R.S. § 49-289.03(A)(3) A.A.C. R18-16-301(C)	No prospective purchaser agreement requests have been submitted to date.				
Any Phase	Publish a public notice announcing the intention of ADEQ to enter into a settlement agreement with a responsible party. The notice will provide the opportunity for a 30-day public comment period.	A.R.S. § 49-289.03(A)(4) A.A.C. R18-16-301(C)	No settlement agreement requests have been submitted to date.				





B. Community Involvement Action Summary – Communication Techniques

There are required communications activities for every phase of the WQARF process as previously described in the Community Involvement Action Summary table. This section describes the specific activities and resources ADEQ uses and has available to communicate with, educate, and help the community and stakeholders become actively involved in the Stone Avenue and Grant Road, 7th Street and Arizona Avenue and Park-Euclid WQARF sites.

ADEQ will continue to use the following resources to keep stakeholders informed throughout the process:

- 1. CAB The CAB has been conducting public meetings about the Park-Euclid site since March 29, 2000, the 7th Street and Arizona Avenue site since November 14, 2013 and the Stone Avenue and Grant Road site since March 2017. CAB members advise ADEQ on appropriate means of delivering site information as well as provide input regarding content. CAB members also serve as an information resource for their community. CAB meetings are held at a location and date mutually agreed upon by the CAB members and an ADEQ representative. Care is taken to ensure the location is easily accessible for the public to attend. For a list of current CAB members, see Appendix D.
- **2. Local Print Media** ADEQ will publish all public notices in the *Daily Territorial*, which has a search function for public notices (http://dailyterritorial.com/public-notices/). For a list of other media outlets, see Appendix E.
- 3. U.S. Mail and Email Lists ADEQ maintains U.S. Mail and email address lists for the Stone Avenue and Grant Road, 7th Street and Arizona Avenue and Park-Euclid WQARF sites. Mailing list addresses are compiled and updated on an ongoing basis through CIP updates; return mailers from fact sheets; CAB, open house, and public meeting attendance lists; and other individual requests. These distribution lists include CAB members, local elected and appointed officials, neighborhood and homeowner association contacts, and schools and vulnerable population centers representing/located within the site's community involvement areas (see Appendices B through D), and other interested parties. Email mails are gathered through ADEQ website through the subscribe feature. Community members can choose the topics for which to subscribe.
- **4. ADEQ Website** ADEQ's website provides visitors with three areas of information related to the site and is updated on an ongoing basis:
 - Calendar Page This calendar provides information regarding public meetings (including CAB meetings), notices, and public comment periods: http://azdeq.gov/.
 - Site Information Pages These pages provide detailed site information, links to announcements, agendas, and CAB minutes, and access to the online information repositories for the sites, which include milestone documents: http://www.azdeq.gov/node/2332 http://azdeq.gov/node/987 and http://azdeq.gov/node/1013.



- **5. ADEQ Notice Boards** Notice boards are located in ADEQ's Phoenix and Tucson offices.
- **6. Public Meetings** Public meetings or open houses, beyond the CAB meetings, may be scheduled and conducted as needed and as determined by ADEQ and the CAB (for example, meetings with neighborhood/homeowners associations, schools, or other community groups).
- **7. Site Tours** Tours of the sites can be requested and arranged in conjunction with the property owners and in compliance with current laws and regulations by contacting the ADEQ Community Involvement Coordinator.

The following Communication Techniques table illustrates how these techniques have and will be used throughout the WQARF process for the Stone Avenue and Grant Road, 7th Street and Arizona Avenue and Park-Euclid WQARF sites.



	Communication Techniques						
	Communications Deliverable Communications Recipients/Methods						
Type ⁷	Why	When	CAB Members	Interested Parties List	ADEQ Website	Local Print Media	ADEQ Notice Board
Notice	Provide notice of availability of milestone documents, request commands, and solicit input.	Per mandate (see Community Involvement Action Summary table).	√	√	(Site and calendar pages)	✓ (The Daily Territorial)	✓
CAB Meeting Notice/Agenda	Provide two-way communication about the status of site activities. The notice announces the meeting and provides the agenda.	Variable schedule based on level of site activity as schedules by CAB and ADEQ, with the exception of the required public meeting for the solicitation of remedial objectives (see Community Involvement Action Summary table).	√	√	✓ (Site, calendar, and CAB meetings pages)	Not Applicable	√
Technical Presentation	Provide current information about the site activity or related topics.	At CAB meetings or at specially requested public meetings.	√	Not Applicable	(Site and CAB meetings pages)	Not Applicable	Not Applicable
Technical Milestone Document	Provide current technical information about site investigation/remediation activities (e.g. Remedial Investigation, Feasibility Study, etc.).	According to the WQARF Process as documents are developed and become available.	✓	Not Applicable	(Online information repository)	Not applicable	Not Applicable
Site Fact Sheet/Newsletter	Provide current information about site activity.	Published at the start of the Remedial investigation and at specific milestones or other times as deemed appropriate by ADEQ and the CAB.	√	✓	✓ (Online information repository)	Not Applicable	Not Applicable
Public Meeting	Provide forum to solicit Remedial Objectives. (Note that this meeting may be conducted in conjunction with a CAB meeting.) Additional public meetings may be used to discuss site activities as determined by level of community interest.	As required/if requested.	✓	✓	✓ (Site and calendar pages)	Not Applicable	✓
Site Tour	Provide walking or driving tour of the site to observe current site conditions and the surrounding community environment.	If requested and with cooperation of current property owners.		Contact C	Community Involvement Coc	ordinator.	

⁷ Communications deliverables may be translated into Spanish if deemed necessary or requested.

Stone Avenue and Grant Road, 7th Street and Arizona Avenue,



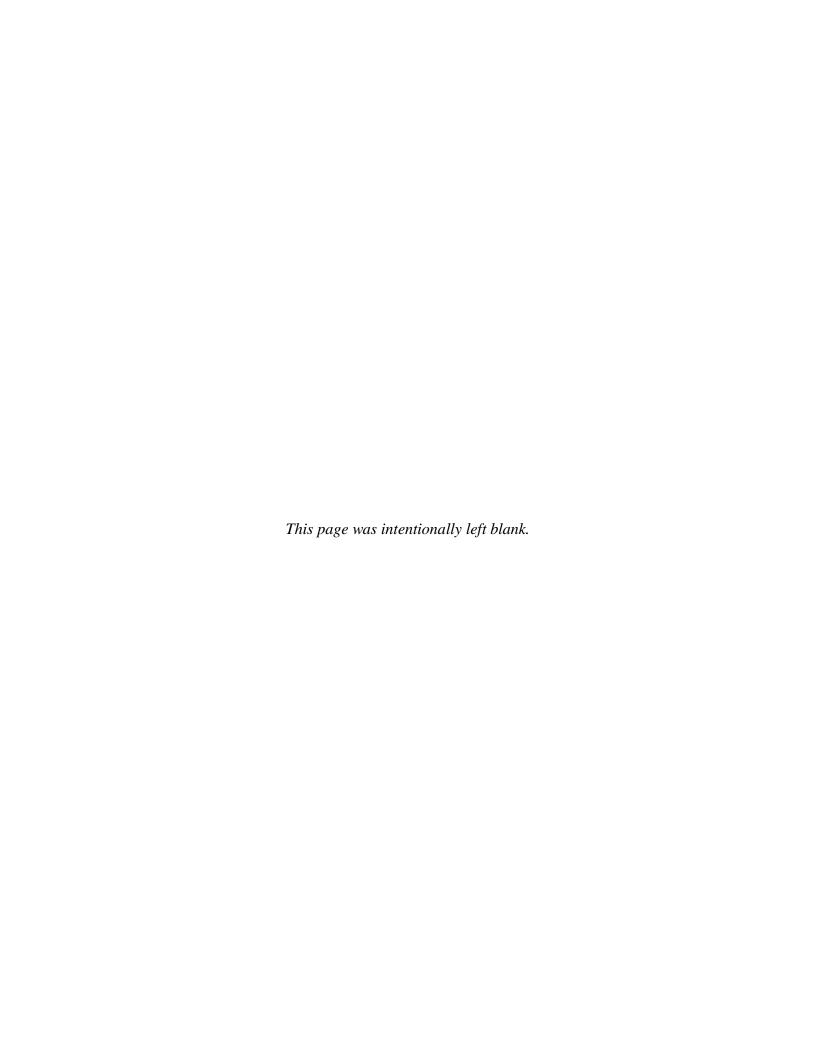


C. Other Resources and Contacts

In addition to the designated spokesperson and information repository identified at the beginning of this CIP, the appendices included in this CIP provide additional resources and contact information to use as desired.

- **Appendix A** provides a history of major activities by year at the Stone Avenue and Grant Road, 7th Street and Arizona Avenue and Park-Euclid WQARF sites.
- **Appendix B** provides a list of targeted communities in the Stone Avenue and Grant Road, 7th Street and Arizona Avenue and Park-Euclid WQARF sites community involvement areas. These include neighborhood associations registered with the City of Tucson Neighborhood Association, and community schools and vulnerable population centers that fall within the community involvement areas.
- **Appendix** C provides a table of local and state elected officials, by ward or district, who represent communities within the community involvement areas. Note that some wards or districts may encompass more of the community involvement areas that others.
- **Appendix D** provides a table of current CAB members for the Stone Avenue and Grant Road, 7th Street and Arizona Avenue and Park-Euclid WQARF sites.
- **Appendix E** provides a list of media outlets in the area. All future public notices for the Stone Avenue and Grant Road, 7th Street and Arizona Avenue and Park-Euclid WQARF sites can be found by searching *The Daily Territorial* publication (http://dailyterritorial.com).
- **Appendix F** provides a list of other related state and local agencies that may be of interest to the public.





Appendix A – Site Histories

The following presents site histories in chronological order for the Arizona Department of Environmental Quality (ADEQ) Stone Avenue and Grant Road, 7th Street and Arizona Avenue and Park-Euclid Water Quality Assurance Revolving Fund (WQARF) sites.

Stone Avenue and Grant Road

The current site contaminant of concern is tetrachloroethylene (PCE) and trichloroethene (TCE).

- Supreme Cleaners, a dry cleaning facility, began operating at the site. PCE was the main solvent used for dry cleaning. Records indicate that Supreme Cleaning may have been connected to a septic system in the late 1940s.
- Home Laundry and Dry Cleaning operated west of the site from 1960 until 2000.
- A gas explosion occurs at Supreme Cleaners. Natural gas and dry cleaning solvent containing PCE were released. The explosion destroyed the existing building. The facility was rebuilt, and dry cleaning operations resumed.
- Mid-1970s Supreme Cleaners ceased operations in the mid-1970s. After Supreme Cleaners ceased operations, a retail automotive paint store (Automotive Paint Specialists) began operations at the site. Finishmasters, Inc., another retail automotive paint store, currently operates at the site.
- PCE was detected in the regional aquifer in one of two Sleepy Hollow Mobile Home Park domestic wells, located approximately 0.6 miles from the former Supreme Cleaner's at a concentration of 2.8 micrograms per liter (μg/L).
- The City of Tucson conducted soil and soil-gas sampling at the site. PCE was not detected above laboratory detection levels in the eleven soil samples collected from four soil borings. PCE was detected in all four sub-slab soil-gas samples ranging from 22,000 to 450,000 micrograms per meter cubed ($\mu g/m^3$).
- 2015 PCE and TCE were found at a LUST site directly to the north of the Supreme Cleaners facility at concentrations of 515 µg/L and 5.73 µg/L, respectively.
- ADEQ completed a Preliminary Investigation (PI) of the site in February 2016. A PI report was prepared which documented the history of the site, included a conceptual site model, and also listed environmental sites in the area.
- The site was listed on the WQARF Registry on January 20, 2017. Early Response Activities are planned for the Finishmaster, Inc. property. The Remedial Investigation and an Early Response Action began in July 2017.



7th Street and Arizona Avenue

- 1957 1989 Dry cleaning businesses were located on the property at 300 East 7th Street. The building on the property was destroyed by fire in 1989, and now the property is vacant and used for parking. Tetrachloroethene (PCE) used in the dry cleaning process was stored in underground storage tanks.
- 1991 Seven underground storage tanks, five solvent tanks, and two heating and waste oil tanks were removed from the property at 300 East 7th Street in Tucson, Arizona.
- 1992 An assessment of soil and groundwater beneath the site was conducted. Soils near the heating and waste oil tanks were found to contain petroleum hydrocarbons. Analysis of a groundwater sample from a water supply well on the site revealed a presence of PCE and trichloroethene (TCE) in the regional aquifer underlying the site.
- 2000 In April, the site was placed on the WQARF Registry with an eligibility and evaluation score of 40 out of a possible 120. The 7th Street and Arizona Avenue WQARF site contaminants of concern are PCE, TCE, and cis-1,2-dichloroethene.
- 2003 In July, a report of the findings and recommendations for a potential early response action under WOARF was completed. Investigations showed that while a release of PCE and possible TCE had occurred at the 300 East 7th Street property, there appeared to be no route for human exposure.
- 2005 conducted ADEO two groundwater monitoring events, which indicated that elevated concentrations of PCE and TCE existed in the surrounding perched groundwater monitor wells. No contaminations were detected above regulatory standards in the regional aquifer.
- 2006 In June, ADEQ began operating a soil vapor extraction (SVE) system at the former Oliver's Cleaners located at 300 East 7th Street.



Groundwater Sampling at the 7th Street and Arizona Avenue WQARF Site

2007

In February, five monitoring wells were installed to further investigate the boundary of PCE and TCE contamination.

In October, an air sparging pilot test was conducted to evaluate the feasibility of air sparging as a remedial method.

In November, two or more monitoring wells were installed.

2009

In June, the SVE system was permanently turned off because the system had reached the appropriate cleanup criteria. From June 2006 through June 2009, the SVE system removed approximately 770 pounds of volatile organic compounds. Perched well locations were investigated to define the farthest limits of the contaminant plume and to determine limits of the perched aquifer. In late 2009, all work at this site was temporarily suspended until further funding was available.

2011

In October and November, five nested soil gas probes and two groundwater monitoring wells were sampled for soil gas. The sample locations were located on the former Oliver's Cleaners property located at 300 East 7th Street and in the City of Tucson right-of-way immediately adjacent to the property. Soil gas data was converted to soil matrix concentrations. No Arizona soil remediation levels were exceeded for the contaminants of concern.

2012

In May, groundwater samples were collected from 28 wells and oil vapor samples were collected from 19 wells from an area that included the entire WQARF site. Groundwater sampling results were consistent with previous results with only slight variations. Soil gas data was converted to soil matrix concentrations. No Arizona soil remediation levels were exceeded.

In October and November, two new wells were installed in the perched and regional aquifers, respectively. One additional perched well was drilled that resulted in a dry hole. This well will be maintained as a soil vapor well. PCE was detected in the new perched well at 4 (μ g/L), below the Arizona Aquifer Water Quality Standard of 5 μ g/L. PCE in the new regional well was non-detect. PCE was detected in soil gas in the new soil monitoring well at 488 μ g/m³.

2013

In March, a groundwater sampling event occurred. The highest detection of PCE was 39 μ g/L, above the Arizona Aquifer Water Quality Standard of 5 μ g/L.

2014

The final Remedial Investigation, Feasibility Study, and Proposed Remedial Action Plan were completed in the spring.

2015

A second source, the former dry-cleaning facility property at 847 North Stone Avenue, was added to the site.

2017

SVE was implemented at 847 North Stone Avenue as an early response action for the second source.

2018

ADEQ is in the process of re-evaluating the necessity of addressing data gaps at the site and revising the FS to include consideration of the 847 North Stone Avenue source.

Park-Euclid

1990

While ADEO was investigating diesel contamination in the area, a groundwater sample was collected from a well on the Mission Linen property located at 301 South Park Avenue. Analysis of the sample indicated that



Mission Linen and Uniform Service located on Park Avenue.

contamination was present in the well. It was a combination of diesel product and volatile organic compounds including PCE, TCE, and 1,2-dichloroethene.

1992

Mission Linen conducted a Phase I investigation that included soil gas sampling, groundwater sampling, and the abandonment of an inactive water supply well.

1993

Mission Linen conducted investigations that focused on the perched aquifer and the installation of a short-term pilot SVE system.

1994

Mission Linen began investigating the regional groundwater aquifer including the examination of potential hydraulic connections between the perched and regional aquifers.

1998

The U.S. Environmental Protection Agency (EPA) initiated site assessment activities in the area with the installation of two upgradient perched groundwater monitor wells.

1999

The site was placed on the WQARF Registry with an eligibility and evaluation score of 51 out of a possible 120. In October, ADEO initiated a Remedial Investigation. As part of the investigation, ADEQ began sampling two University of Arizona water supply wells located downgradient from the site.

2000

In January, three regional groundwater sentinel wells were installed south of the University of Arizona's main campus to monitor groundwater conditions.

In February, EPA informally delegated responsibility for the site to ADEQ through the Remedial Investigation/Feasibility Study stages.

2000

Mission Linen completed the installation of an SVE system beneath the facility at 301 South Park Avenue. The pilot SVE system operated from June 2000 to August 2003 and removed approximately 6,000 pounds of PCE.

Since August, monthly groundwater samples have been collected from the three sentinel wells. No PCE contamination above the Arizona Aquifer Water Quality Standard of 5 μ g/L has been detected in the University of Arizona's water supply wells.

2000 - 2001

From November 2000 to February 2001, ADEQ installed twelve additional groundwater monitor wells to further characterize volatile organic compound and diesel contamination in the two aquifers underlying the site. ADEQ conducted site investigation activities within the vadose zone and shallow aquifer.

2002 - 2003

ADEQ installed an additional eight groundwater and three soil vapor monitor wells from May 2002 to February 2003. In February 2003, ADEQ conducted site investigation activities that focused on the sewer near the Mission Linen property.

2004

In July, ADEQ released the Draft Remedial Investigation report summarizing site characterization activities. Also, Mission Linen expanded the pilot SVE system and continued remediation of the shallow soils beneath the facility. The existing SVE system removed an additional 420 pounds of PCE from the shallow soils.

2006

In August, ADEQ completed the Remedial Objectives Report following the completion of the public comment period. The Remedial Objectives for land use beneath Mission Linen is to restore soil conditions to the state's non-residential soil remediation levels. The Remedial Objectives for drinking water use of the groundwater from the regional aquifer is to protect the use of the University of Arizona and the City of Tucson groundwater supplies from contamination from the site.

2007

Periodic groundwater monitoring and sampling occurred along with monthly sampling of the University of Arizona production wells and ADEQ's sentinel wells.

2008

Mission Linen completed construction of the multi-phase extraction (MPE) system to remediate contaminants, including PCE, in the perched aquifer and upper vadose zone. The MPE system became operational in April. Also in April, ADEQ installed a deeper sentinel well at the UAM-2 well location. This well is used from monitoring a deeper portion of the regional aquifer near the University of Arizona production wells.

2009

ADEQ continued to work on completing the Remedial Investigation. Mission Linen operated the MPE system at the facility until June. A report detailing system operations was released in November. In this pilot phase of the MPE system, approximately 1,396 pounds of volatile organic compounds and 750 gallons of diesel free-product were removed, while treating 38,851 gallons of groundwater.

- The responsible parties at the site signed an agreement to form the Park-Euclid Group to manage and fund remediation activities at the site. Work plans were prepared and reviewed for groundwater monitoring and restarting the MPE system.
- In October, the MPE system was restarted.

In November and December, groundwater sampling occurred. The Final Remedial Investigation Report was completed in November.

- At the end of March, the MPE system had treated 8,565 gallons of water and removed a total mass of 542 pounds of volatile organic compounds. The MPE system operated routinely through September, then was shut down for the remainder of the year. Groundwater sampling occurred in January through March, and monthly ran from August to December.
- In January, the MPE system was restarted and ran continuously through February, after which it ran intermittently due to maintenance and overheating issues. Through the end of June, the MPE system has removed approximately 400 pounds of volatile organic compounds and 1,700 gallons of diesel free-product.

In January, the Feasibility Study Work Plan for future cleanup of the site was completed and approved. It established plans to install an additional regional aquifer monitoring well, upper vadose zone soil vapor sampling wells, and installation of a pilot SVE system for the lower vadose zone.

In February, groundwater sampling of all the monitoring wells occurred with repeated sampling of the majority of wells in May and August.

The Park-Euclid Group provided ADEQ with technical reporting concerning its groundwater modeling for the Feasibility Study and AVE testing for the lower vadose zone, sampled groundwater (perched and regional) and soil gas wells at the site. The Park-Euclid Group also obtained access for installation of a regional groundwater monitor well to further delineate the "toe" of the plume and for performing shallow soil gas migration pathway risk assessment.

In April, the MPE system was shut down, but it is currently being evaluated under the Feasibility Study as a potential component of the final remedy.

- The Final Feasibility Study was submitted to ADEQ in the spring for approval and public comment.
- In October, the Draft Feasibility Study Report was completed by the Park-Euclid Group and given final approval by ADEQ in November.



Appendix B – Targeted Communities

A. Neighborhood Associations

The following presents the registered neighborhood associations and their respective points of contact in the Stone Avenue and Grant Road, 7th Street and Arizona Avenue and Park-Euclid Water Quality Assurance Revolving Fund (WQARF) sites community involvement areas⁸:

Stone Avenue and Grant Road

Balboa HeightsNo phone providedJane BakerJ3149@aol.com

2620 North Balboa Avenue, Tucson, AZ 85705

Coronado Heights(520) 551-6849Lois E. Millerlois.e.miller@gmail.com

208 West Laguna Street, Tucson, AZ 85705

El Cortez Heights (520) 624-0198 Dennis Caldwell dennis@caldwell-design.com

549 East Seneca Street, Tucson, AZ 85705

Keeling
Jane Evans
(520) 792-1592
jre@lithops.com

2945 North Fontana Avenue, Tucson, AZ 85705

Miracle Manor (520) 792-0193

Grace Aranda <u>antrnweb@ahsc.arizona.edu</u> P.O. Box 78162, Tucson, AZ 86703

⁸ The City of Tucson Neighborhood Associations website does not provide address information for each respective neighborhood association president.



7th Street and Arizona Avenue and Park-Euclid

Barrio San Antonio Neighborhood Association	(520) 884-5124
Michael Mason	<u>its@theriver.com</u>
Dunbar Spring Neighborhood Association	(520) 322-0285
Sky Jacobs	skyjacobs@gmail.com
El Presidio Neighborhood Association	(520) 393-8907
Stephen Michael Rebro	mikerebro@yahoo.com
Feldman's Neighborhood Association Dean Knuth	(520) 349-1625 President@FeldmansAZ.org
Iron Horse Neighborhood Association	(520) 909-9977
John Daniel Twelker	dtwelker@eye.arizona.edu
Miles Neighborhood Association Jamison Summer	(520) 405-8621 Email address listed does not work
Millville Neighborhood Association	(520) 622-5811
George Kalil	gkalil@kalilbottling.com
Pie Allen Neighborhood Association Nancy Robins	(520) 323-7133 nbrbns@aol.com
Rincon Heights Neighborhood Association Colby Henley	No phone number available psalm116@gmail.com
West University Neighborhood Association	(520) 603-9783
Chris Gans	cgans@msn.com



B. Community Schools

The Stone Avenue and Grant Road, 7th Street and Arizona Avenue and Park-Euclid WQARF sites community involvement areas include the Tucson Unified School District and the Amphitheater Public School District. The following presents the community schools in the Stone Avenue and Grant Road, 7th Street and Arizona Avenue and Park-Euclid WQARF sites community involvement areas:

Direct Link I and II 445 South Park Avenue, Tucson, AZ 85719	(520) 225-2698
Ha:san Preparatory and Leadership School 1333 East 10 th Street, Tucson, AZ 85719	(520) 882-8826
Joyce Drake Alternative Middle School 445 South Park Avenue, Tucson, AZ 85719	(520) 225-2643
Mansfield Middle School 1300 East 6 th Street, Tucson, AZ 85719	(520) 225-1800
Pima Community College – Downtown Campus 1255 North Stone Avenue, Tucson, AZ 85709	(520) 206-7171
Project More High School 440 South Park Avenue, Tucson, AZ 85719	(520) 225-2600
Tucson International Academy – Broadway Campus 1230 East Broadway Boulevard, Tucson, AZ 85719	(520) 792-3255
Tucson Unified School District Main Office 1010 East 10 th Street, Tucson, AZ 85719	(520) 225-6000
Amphitheater Public Schools District Office 701 West Wetmore Road, Tucson, AZ 85705	(520) 696-5000
E.C. Nash Elementary School 515 West Kelso Street, Tucson, AZ 85705	(520) 696-6440



C. Vulnerable Population Centers

The following presents a list of vulnerable population centers, including places such as child care and assisted living facilities, in the Stone Avenue and Grant Road, 7th Street and Arizona Avenue and Park-Euclid WQARF sites' community involvement areas:

The Apple Tree Learning Center 1010 East Broadway Boulevard, Tucson, AZ 85719	(520) 822-3816
Imagination Tree Learning Center 1403 East Broadway Boulevard, Tucson, AZ 85719	(520) 624-7311
Montessori Schoolhouse 1127 North 6 th Avenue, Tucson, AZ 85705	(520) 655-8668
Scottish Rite/University of Arizona Wings on Words – Child Language Cen 202 East Speedway Boulevard, Tucson, AZ 85705	ter (520) 628-1659
Tucson Unified School District #1 – Miles Preschool 1400 East Broadway Boulevard, Tucson, AZ 85719	(520) 225-2200
University of Arizona – SRC "A" Camp 1400 East 6 th Street, Tucson, AZ 85721	(520) 621-4709
Child-Parent Centers, Inc. (Northwest Head Start Center) 2160 North 6 th Avenue, Tucson, AZ 85705	(520) 884-8180
Jacinto Park Head Start 701 West Tipton Drive, Tucson, AZ 85705	(520) 624-7843
Oasis at El Corral Assisted Living Center 2721 North Oracle Road, Tucson, AZ 85705	(520) 624-1771



Appendix C – Local and State Elected Officials

As of the publication of this community involvement plan, the community involvement area for the Stone Avenue and Grant Road, 7th Street and Arizona Avenue and Park-Euclid WQARF sites falls under Tucson Wards 1, 3, 5 and 6; Pima County Supervisorial Districts 2, 3 and 5; and Arizona Legislature District 3.

CITY	COUNTY	STATE	STATE
Officials	Supervisors	Representatives	Senators
	<u> </u>	Arizona House of	
City Hall	Pima County Board of	Representatives	Arizona State Senate
255 W. Alameda St.	Supervisors	Capitol Complex	Capitol Complex
10 th Floor	130 W. Congress St.	1700 W. Washington St.	1700 W. Washington St.
Tucson, AZ 85701	11 th Floor	Phoenix, AZ 85007	Phoenix, AZ 85007
(520) 791-4213	Tucson, AZ 85701	(602) 926-4221	(602) 926-3559
	(520) 724-9999		
		Representative	Senator
Mayor	County Supervisor	District 3	District 3
City of Tucson	District 2	Macario Saldate IV	Olivia Cajero Bedford
Jonathon Rothschild	Ramón Valdez		
(520) 791-4204		Room #115	Room #314
Mayor1@tucsonaz.gov	(520) 724-8126	(602) 926-4171	(602) 926-5835
	District5@pima.gov	msaldate@azleg.gov	ocajerobedford@azleg.gov
	County Supervisor	Representative	
City Manager	District 3	District 3	
City of Tucson	Sharon Bronson	Sally Ann Gonzales	
Michael Ortega			
(520) 791-4204	(520) 724-8051	Room #116	
citymanager@tucsonaz.gov	District5@pima.gov	(602) 926-3278	
		sgonzales@azleg.gov	
Tucson City Council	County Supervisor	Representative	
Member	District 5	District 3	
Ward 1	Richard Elías	Raul M. Grijalva	
Regina Romero	(520) 524 0126	(520) 522 5500	
(520) 791-4040	(520) 724-8126	(520) 622-6788	
ward1@tucsonaz.gov	District5@pima.gov	Cassandra.becerra@mail.	
Tucson City Council		<u>house.gov</u>	
Member			
Ward 3			
Ward 3 Paul Durham			
(520) 791-4711			
(520) 791-4711 ward3@tucsonaz.gov			
Tucson City Council			
Member			
Ward 5			
Richard Fimbres			
(520) 791-4231			
ward5@tucsonaz.gov			
ward5@tucsonaz.gov			



CITY	COUNTY	STATE	STATE
Officials	Supervisors	Representatives	Senators
Tucson City Council			
Member			
Ward 6			
Steve Kozachik			
(520) 791-4601			
Ward6@tucsonaz.gov			

Appendix D – Community Advisory Board Members

The following table presents a list of the Stone Avenue and Grant Road, 7th Street and Arizona Avenue and Park-Euclid Water Quality Assurance Revolving Fund (WQARF) Registry sites Community Advisory Board (CAB) members as of Summer 2018.

	Frant Road, 7 Park-Euclid V CAB Co	WQARF Sites	Arizona Avenue and
Mark Verhougsta (517) 712-0015 mverhougstraete@email.a	2-0015		Bill Richards (520) 790-2207 ards003@earthlink.net
CAB Members			
Keith Bagwell	Jonathan S	Salvatierra	Jacky Turchick
(520) 740-8126	(520) 35	58-7607	(520) 628-9616
Kbagwell744@gmail.com	visionsnow@	hotmail.com	seedling@theriver.com
Richard Byrd	Menachem	Turchick	Diana Lett
(520) 791-5414	(520) 740-4310		(520) 977-0870
richard.byrd@tucsonaz.gov	mturchi@mir		paruni@dakotacom.net
Steven Turner	David J	onathas	
(520) 850-7833	No phone nun	nber provided	
5208507833@vtext.com	Johndave2009	-	



Appendix E – Media Outlets

The following list presents Tucson metropolitan area media outlets that may be used by the public and Community Advisory Board members to promote information on the Stone Avenue and Grant Road, 7th Street and Arizona Avenue and Park-Euclid Water Quality Assurance Revolving Fund Registry sites. The *Daily Territorial* is the external media outlet that the Arizona Department of Environmental Quality will use to publish all public notices related to the sites.

A. Newspapers and Magazines

Arizona Daily Star 4850 South Park Avenue, Tucson, AZ 85714	(520) 573-4400
Arizona Daily Wildcat 615 North Park Avenue, Room 101, Tucson, AZ 85721	(520) 621-7579
Biz Tucson 4729 East Sunrise Drive, Suite 505, Tucson, AZ 85718	(520) 299-1005
The Daily Territorial 3280 East Hemisphere Loop, Suite 125, Tucson, AZ 85706	(520) 294-1200
Desert Times 7225 North Mona Lisa Road, Suite 125, Tucson, AZ 85741	(520) 797-4384
The Explorer Newspaper 7225 North Mona Lisa Road, Suite 125, Tucson, AZ 85714	(520) 797-4384
Inside Tucson Business 7225 North Mona Lisa Road, Suite 125, Tucson, AZ 85714	(520) 797-4384
Tucson Citizen ⁹	No phone number
Tucson Weekly 3280 East Hemisphere Loop, Suite 180, Tucson, AZ 85706	(520) 294-1200
Desert Leaf 3978 East Fort Lowell Road, Tucson, AZ 85712	(520) 881-5188
The Arizona Business Gazette 200 East Van Buren Street, Phoenix, AZ 85004	(602) 444-8000
The Arizona Republic 200 East Van Buren Street, Phoenix, AZ 85004	(602) 444-8000

⁹ The *Tucson Citizen* ended its print edition in 2009, then became an online compendium for blogs until February 2014. The *Tucson Citizen* website (www.tucsoncitizen.com) remains an archive as a community resource.



B. Radio

Arizona News Radio Network (KJLL – Tucson News Network) 14605 North Airport Drive, Suite 370, Scottsdale, AZ 85260	(480) 483-8415
Arizona Public Media (KUAT, KUAZ [National Public Radio]) P.O. Box 210067, Tucson, AZ 85721	(520) 621-5805
Clear Channel Communications (KMIY, KRQQ, KYWD, KOHT, KNST, KTZR, KXEW) 1200 North Wilmot Road, Tucson, AZ 85712	(520) 618-2100
Cumulus Media (KCUB, KHYT, KIIM, KSZR, KTUC) 575 West Roger Road, Tucson, AZ 85705	(520) 887-1000
Foundations for Creative Broadcasting (KXCI) 220 South 4 th Avenue, Tucson, AZ 85701	(520) 623-1000
Good News Radio Broadcasting (KCEE, KVOI, KGMS, KLTU, KNXN) 3222 South Richey Avenue, Tucson, AZ 85713	(520) 790-2440
Journal Broadcast Group (KFNN, KQTH, KFMA, KCMT) 7280 East Rosewood Street, Tucson, AZ 85710	(520) 722-5486
Lotus Communications (KTKT, KLPX, KFMA, KCMT) 3871 North Commerce Drive, Tucson, AZ 85705	(520) 407-4500
IHeartMedia, Inc. (KNST, KTZR) 3203 North Oracle Road, Tucson, AZ 85705	(520) 326-1200
Independent Talk 1100 KFNX 2001 North 3 rd Street, Suite 102, Phoenix, AZ 85004	(602) 277-1100
KVOI The Voice 3222 South Richney Avenue, Tucson, AZ 85713	(520) 790-2440
News Talk 550 KFYI 4686 East Van Buren Street, #300, Phoenix, AZ 85008	1-844-289-7234



C. Television

KFTU-CA Channel 25 (Univision) 2301 North Forbes Boulevard, Suite 103, Tucson, AZ 85745	(520) 204-1270
KGUN Channel 9 (ABC) 7280 East Rosewood Street, Tucson, AZ 85710	(520) 722-5486
KHRR Channel 40 (Telemundo) 5151 East Broadway Boulevard, Tucson, AZ 85711	(520) 396-2617
KMSB Channel 11 (Fox) 7831 North Business Park Drive, Tucson, AZ 85743	(520) 744-1313
KOLD Channel 13 (CBS) 7831 North Business Park Drive, Tucson, AZ 85743	(520) 744-1313
KUAS Channel 27 (PBS) P.O. Box 210067, Tucson, AZ 85721	(520) 621-5805
KVOA Channel 4 (NBC) P.O. Box 5188, Tucson, AZ 85703	(520) 792-2270
KAET Channel 8 (PBS Phoenix) 555 North Central Avenue, Suite 500, Phoenix, AZ 85004	(602) 496-8888
KNXV Channel 15 (ABC Phoenix) 515 North 44 th Street, Phoenix, AZ 85008	(602) 273-1500
KPHO Channel 5 (CBS Phoenix) 4016 North Black Canyon Highway, Phoenix, AZ 85017	(602) 264-1000
KPNX Channel 12 (NBC Phoenix) 200 East Van Buren Street, Phoenix, AZ 85004	(602) 257-1212
KUDF-LP Channel 14 (Una Vez Mas) 1201 East Broadway Boulevard, Tucson, AZ 85719	(520) 398-7922
KSAZ Channel 10 (Fox Phoenix) 511 West Adams Street, Phoenix, AZ 85003	(602) 257-1234
KTAZ Channel 30 (Telemundo Phoenix) 4625 South 33 rd Place, Phoenix, AZ 85743	(602) 648-3900
KTTU Channel 18 (UPN 18) 7831 North Business Park Drive, Tucson, AZ 85743	(520) 624-0180



D. Television (Continued)

KTVW Channel 33 (Univision Phoenix) 6006 South 30 th Street, Phoenix, AZ 85042	(602) 246-3333
KUAT Channel 6 (PBS 6) 1423 East University Boulevard, #225, Tucson, AZ 85721	(520) 621-5828
KUVE Channel 46 (Univision 52) 2301 Forbes Boulevard, Tucson, AZ 85745	(520) 204-1246
KWBA Channel 58 (CW 58) 3055 North Campbell Avenue, #113, Tucson, AZ 85719	No phone listed
Tucson 12 Channel 12 (TV12) P.O. Box 27210, Tucson, AZ 85726	(520) 791-2582
Tucson Access P.O. Box 2688, Tucson, AZ 85701	(520) 624-9833
Tucson News KVOA (NBC 4, KVOA-DT, UHF 23) 209 South Elm Street, Tucson, AZ 85705	(520) 792-2270



Appendix F – Related Agencies and Contact Information

The following list presents additional resources that may be used by the public and Community Advisory Board members to address concerns or questions related to the Stone Avenue and Grant Road, 7th Street and Arizona Avenue and Park-Euclid Water Quality Assurance Revolving Fund Registry sites.

A. State of Arizona

Department of Agriculture

1688 West Adams Street Phoenix, AZ 85007 Phone: (602) 542-4373

Arizona Department of Health Services

150 North 18th Avenue Phoenix, AZ 85007 Phone: (602) 542-1025

Arizona Department of Water Resources Groundwater Permitting and Wells Section

3550 North Central Avenue Phoenix, AZ 85012 Phone: (602)771-8527

B. City of Tucson

Housing and Community Development Department

Santa Rita Building 310 North Commerce Park Loop Tucson, AZ 85745 Phone: (520) 791-4171

Recycling Program/Solid Waste

Price Service Park 4004 South Park Avenue, Building 1 Tucson, AZ 85714 Phone: (520) 791-3171

Tucson Water Department

3100 West Alameda Street Tucson, AZ 85701 Phone: (520) 791-4331



C. City of Tucson (Continued)

Public Works Department

130 West Congress, 10th Floor Tucson, AZ 85701 Phone: (520) 838-7430

Public Information Office

255 West Alameda Street, #4 Tucson, AZ 85701

D. Other

Agency for Toxic Substances and Disease Registry

Western Branch – Region 9 75 Hawthorne Street, Suite 100, M/S:HHS-1 San Francisco, CA 94105 Phone: (800) 232-4636 Consumer Information Line: (800) 223-0618

Real Estate Seller Disclosures

Arizona Department of Real Estate 2910 North 44th Street, Suite 110 Phoenix, AZ 85018 Phone: (602) 771-7799

Pima County Health Department

3950 South Country Club Road, Suite 100 Tucson, AZ 85714 Phone: (520) 724-7797

Tucson Association of Realtors Real Estate Seller Disclosures

2445 North Tucson Boulevard

Tucson, AZ 85716 Phone: (520) 327-4218 Fax: (520) 322-6613

Email: info@tucsonrealtors.org

www.tucsonrealtors.org



Acronyms and Glossary of Terms

Aquifer: An underground rock formation composed of such materials as sand, soil, or gravel that can store groundwater and supply it to wells and springs. In aquifer, groundwater occurs in sufficient quantities to be used for drinking water, irrigation, and other purposes.

Aquifer Water Quality Standards (AWQS): State of Arizona maximum levels for contaminants which apply to groundwater in aquifers designated for drinking water use. For example, the AWQS for tetrachloroethene is 5 micrograms per liter (μ g/L).

Arizona Administrative Code (A.A.C): The publication in which the official rules of the state of Arizona are published. The *Code* is the official compilation of rules that govern state agencies, boards, and commissions.

Arizona Department of Environmental Quality (ADEQ): ADEQ is the executive agency of the Arizona State Government mandated to enforce and administer the State's environmental laws and regulations.

Arizona Revised Statutes (A.R.S.): State laws adopted by the Arizona State Legislature.

Cleanup: Actions taken that deal with a release or threat of a release of hazardous substances that could adversely affect public health and/or the environment. The word "cleanup" is sometimes used interchangeably with the terms remedial action, removal action, response action, remedy, remediation, or corrective action.

Community Advisory Board (CAB): A diverse group of community members interested in or affected by the presence of a WQARF site. By statute, ADEQ is required to form a CAB for each WQARF Registry site where ADEQ is initiating a Remedial Investigation. ADEQ seeks the CAB's input in the decision-making process and works with them from the onset of the RI/FS process until the requirements of the record of decision have been fulfilled.

Community Involvement Area: The mailing area of residences and businesses used in the notification for public meetings and other written notices regarding a site.

Community Involvement Coordinator: The ADEQ employee responsible for ensuring that all statutes and rules related to the involvement of the public and public outreach at WQARF sites are upheld and complied with by ADEQ. Community Involvement Coordinators manage and coordinate the work of CABs for WQARF sites.

Community Involvement Plan (CIP): A document that identifies techniques used by ADEQ and EPA to communicate effectively with the public during the Superfund cleanup processes at a specific site. This plan describes the site history, nature and history of community involvement, and concerns expressed during community interviews. In addition, the plan outlines methodologies and timing for continued interaction between the Agencies and the public at the site.



Contamination: Any hazardous or regulated substance released into the environment.

Contaminant: Any physical, chemical, biological or radiological substance or matter present in any media at concentrations that may result in adverse effects on air, water or soil. A harmful or hazardous matter introduced into the environment that is not normally found there, or not naturally occurring.

Early Response Action (ERA): Refers to a remedial action performed prior to the final remedy, and often prior to the Remedial Investigation. An ERA addresses current risks to public health, welfare, and the environment; protects or provides a supply of water; addresses sources of contamination; or controls or contains contamination where such actions are expected to reduce the scope or cost of the remedy needed at the site. Also referred to as an interim remedial action.

Feasibility Study (FS): A process to identify a reference remedy and alternative remedies that appear to be capable of achieving the Remedial Objectives for the site. It is often done as part of a two-phase investigation in conjunction with a Remedial Investigation (RI/FS).

Groundwater: Water located beneath the ground surface in soil pore spaces and in the fractures of geologic formations. A formation of rock or soil is called an aquifer when it can yield a usable quantity of water.

Hazardous Substance: Any material that, because of its quantity, concentration, physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment.

Information Repository: A collection of documents about a specific project. Information on certain WQARF and Superfund sites may be available at ADEQ offices and libraries throughout the state.

Monitoring Well (Monitor Well): A well installed for the purpose of collecting samples such as groundwater and soil gas. Analytical results from samples are used to characterize the extent of contamination, the direction of groundwater flow, and the types and quantities of contaminants present in the groundwater.

Plume: A well-defined areas of contamination in groundwater, soil or the air, often used to describe the dispersion of contamination in soil and/or groundwater.

Potentially Responsible Party (PRP): A party (individual or corporation) identified by state or federal authorities as potentially liable for cleanup costs at a contaminated site.

Preliminary Investigation (PI): The process of collecting and reviewing available information about a known or suspected hazardous waste site or release.



Proposed Remedial Action Plan (PRAP): A document that reviews the cleanup alternatives presented in the site Feasibility Study and identifies ADEQ's preferred alternative. Selection of a preferred alternative is not a closed-end commitment to use that alternative; rather, it is a way for the agency to indicate, based on experience and expertise, which alternative is the most likely course of action. ADEQ must actively solicit public review of and comment on all the alternatives under consideration.

Public Comment Period: A period during which the public can formally review and comment on various documents and ADEQ actions.

Record of Decision (ROD): A legal document that announces and explains the cleanup methods ADEQ will use at a Superfund/WQARF site. The Record of Decision is based on information and technical analysis generated during the Remedial Investigation and Feasibility Study, and on consideration of comments received during the public comment period for the proposed Remedial Action Plan.

Remedial Action (RA): Any action taken to investigate, monitor, assess and evaluate the release or threat of release of hazardous substances or contaminants to the environment. It may also refer to the actual "cleanup" of the environment by various removal, treatment, monitored remediation, or corrective actions. The term cleanup is sometimes used interchangeably with the terms remedial action, removal action, response action, remedy, remediation, or corrective action.

Remedial Investigation (RI): Establishes the nature and extent of the contamination and the sources; identifies current and potential impacts to public health, welfare, and the environment; identifies current and reasonable foreseeable uses of land and waters of the state; and obtains and evaluates any information necessary for identification and comparison of alternative remedial actions.

Remedial Objective (RO): Established remedial goals for the current and reasonably foreseeable uses of lands and waters of the state that have been or are threatened to be affected by a release of a hazardous substance.

Remediation: Cleanup or other methods used to remove or contain a toxic spill or hazardous materials.

Remedy: Cleanup method chosen for a site.

Responsible Party: An individual or company (*e.g.*, an owner, operator, transporter, or generator of hazardous waste) that is responsible for the contamination problems at a Superfund/WQARF site. Whenever possible, responsible parties are required to clean up hazardous waste sites they have contaminated.

Responsiveness Summary: A summary of oral and written comments (and ADEQ responses to those comments) received during the public comment period.



Soil Remedial Level (SRL): A pre-determined risk-based standard protective for residential or non-residential use based upon the total contaminant concentration in soil. In addition to meeting the SRLs, it must also be shown that soil contaminant levels do not: 1) Cause or threaten to cause a violation of Water Quality Standards that are protective or aquifer water quality and surface water quality; 2) Exhibit a hazardous waste characteristic of ignitability, corrosivity, or reactivity; and 3) Cause or threaten to cause an adverse impact to ecological receptors. SRLs have replaced what were known as Health-Based Guidance Levels or HBGLs.

Soil Vapor Extraction (SVE): Soil vapor extraction removes contaminant vapors from below ground for treatment above ground. Soil vapor extraction removes vapors from the soil above the water table by applying a vacuum to pull the vapors out. The method is used for chemicals that evaporate easily, such as those found in solvents and gasoline.

Superfund: The federal program operated under the legislative authority of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the Superfund Amendments and Reauthorization Act (SARA) that funds and carries out U.S. Environmental Protection Agency solid waste emergency and long-term removal and remedial actions. These activities include establishing the National Priorities List, investigating sites for inclusion on the list, determining their priority, and conducting and/or supervising cleanup and other remedial actions. It provides for the cleanup of hazardous substances released into the environment, regardless of fault. The term Superfund is also used to refer to cleanup programs designed and conducted under CERCLA and its subsequent amendments.

Tetrachlorothene or Tetrachlorothylene or Perchloroethene (PCE): A clear, colorless, liquid with a chloroform or sweet odor and a low boiling point; a solvent used for dry-cleaning; degreasing and drying metals and other solids; dissolving waxes, greases, oils, fats, and gums, and in other industrial applications. PCE is a potential occupational carcinogen. Evaporation of PCE increases as temperature increases.

Trichloroethene or Trichloroethylene (TCE): A colorless liquid used as a solvent, metal degreasing agent, and in other industrial applications.

Volatile Organic Compounds (VOC): A large group of carbon-containing compounds that are easily dissolved into water, soil, or the atmosphere and evaporate readily at room temperature. Examples of VOCs include PCE, TCE, benzene, toluene, ethylbenzene, and xylene. These contaminants are typically generated from metal degreasing, printed circuit board cleaning, gasoline, and wood preserving processes.

Water Quality Assurance Revolving Fund (WQARF): Also known as the State Superfund, WQARF is the program and funding used to address hazardous substance releases within the state that are not covered by other specific programs.

